

Notice of Allowability

Application No.

10/716,110

Examiner

Michael J. Feely

Applicant(s)

QUINITILIO, LUPI

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE and amendment filed 9/14/07.
2. ☒ The allowed claim(s) is/are 13-17.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/920,146.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20070927.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other Detailed Action.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Arlene J. Powers (Reg. No. 35,985) on September 26, 2007.

The application has been amended as follows:

- *In the claims:*

1-12 (Cancelled).

13. (New) A coating composition for a smoothing and/or polishing element, particularly a flexible grinding wheel, provided with a flexible abrasive insert, for smoothing and polishing stone material, said coating composition consisting essentially of: a blend of epoxy resin and polysulfide; a thixotrope; primary amines; and synthetic diamond treated by a polyvinyl-formal primer.

14. (New) A coated substrate comprising a substrate coated with the coating composition of claim 13, wherein the substrate is a grinding wheel.

15. (New) The coated substrate according to claim 14, wherein the coating has a thickness between 0.3 and 1.2 mm.

Art Unit: 1712

16. (New) The coated substrate according to claim 14, wherein the substrate is a flexible grinding wheel.

17. (New) The coating composition according to claim 13, wherein the thixotrope comprises particulates of carbon and silica.

- In the Specification:

- Replace page 1, lines 1-5 with:

**--A COATING COMPOSITION FOR A SMOOTHING AND/OR POLISHING
ELEMENT AND A GRINDING WHEEL PROVIDED WITH SAID COATING
COMPOSITION**

This application is a continuation-in-part of US Ser. No. 09/920,149, filed 08/01/2001, now abandoned.--

- Replace page 4, lines 15-21 with:

-- Therefore a specific object of the present invention is to have a coating for a smoothing and/or polishing element, particularly a flexible grinding wheel, provided with a flexible abrasive insert, for smoothing and polishing stone material, including: between 34 and 52 % by weight of a blend of epoxy resin and polysulfide; between 12 and 19 % by weight of a thixotrope; between

Art Unit: 1712

9 and 18% by weight of primary amines; and synthetic diamond treated by a polyvinyl-formal primer.--

o Replace page 5, lines 1-9 with:

-- A further object of the present invention is a process for coating a grinding wheel providing the following steps:

a) the diamond is mixed/immersed within a liquid product and it is dripped by a suitable sieve;

b) the above is mixed with a pre-mixed product comprising a thixotrope and a polyvinyl formal material;

c) the above is dried for about 4 hours;

d) the above is mixed, by a suitable mixer, with a blend of epoxy resin and polysulfide, a thixotrope, and primary amines;--

o Replace page 6, line 20 through page 7, line 2 with:

-- Therefore a coating for a smoothing and/or polishing element, particularly a flexible grinding wheel, provided with a flexible abrasive insert, for smoothing and polishing stone material, including: between 34 and 52 % by weight of a blend of epoxy resin and polysulfide; between 12 and 19 % by weight of a thixotrope; between 9 and 18% by weight of primary amines; and synthetic diamond treated by a polyvinyl-formal primer.--

Art Unit: 1712

○ Replace page 7, lines 6-11 with:

-- Particularly, the blend of epoxy resin and polysulfide can be comprised of TEXOS B210W®.

Preferably, said thixotrope is present in a percentage of 15% by weight.

Particularly, said thixotrope is comprised of CARBOSIL® comprising particulates of carbon and silica.--

○ Replace page 7, line 17 through page 8, line 3 with:

-- A further object of the present invention is a process for coating a grinding wheel providing the following steps:

a) the diamond is mixed/immersed within a liquid product and it is dripped by a suitable sieve;

b) the above is mixed with a pre-mixed product comprising a thixotrope and a polyvinyl formal material;

c) the above is dried for about 4 hours;

d) the above is mixed, by a suitable mixer, with a blend of epoxy resin and polysulfide, a thixotrope, and primary amines;--

○ Replace page 8, lines 11-16 with:

-- Particularly, the blend of epoxy resin and polysulfide can be comprised of TEXOS B210W®.

Preferably, said thixotrope is present in a percentage of 15% by weight.

Art Unit: 1712

Particularly, said thixotrope is comprised of CARBOSIL® comprising particulates of carbon and silica.--

o Replace the Abstract with:

-- The invention concerns a coating for a smoothing and/or polishing element, particularly a flexible grinding wheel, provided with a flexible abrasive insert, for smoothing and polishing stone material, consisting essentially of: a blend of epoxy resin and polysulfide; a thixotrope; primary amines; and synthetic diamond treated by a polyvinyl-formal primer.--

* * * * *

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 14, 2007 has been entered.

Evidence Supplied by Applicant

3. Applicant provided information data sheets for CARBOSIL®, TEXOS B210W®, and THIOKOL® (Polysulfide Coatings and Sealants). The data sheet for CARBOSIL® verifies that the thixotrope is a mixture of carbon and silica (*see page 4 of the response*). Applicant's translation of this data sheet has been verified with machine translation tools. In addition, the combination of the TEXOS B210W® and THIOKOL® data sheets verifies that the "polysulfuric polymers" are polysulfides (*see page 4 of the response*). Applicant's translation of the TEXOS B210W® data sheet has been verified with machine translation tools.

Response to Amendment

4. The rejection of claim 9 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, has been rendered moot by the cancellation of this claim.

5. The rejection of claims 1-11 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, has been rendered moot by the cancellation of these claims.

Interview Summary

6. On September 26, 2007, the Examiner spoke with Arlene J. Powers (Reg. No. 35,985) regarding a number of issues in this application.

First, the evidence filed on September 17, 2007 was discussed. The Examiner expressed that the evidence was sufficient to demonstrate that the thixotrope was a mixture of carbon and silica (CARBOSIL®). Furthermore, the evidence was sufficient to demonstrate that the "poli-sulfuric" polymers, as described in the specification, claims, and TEXOS B210W®, were polysulfide materials.

Second, the effective filing date of the instant CIP application was discussed. The parent application was abandoned for reasons including the following: the concentration ranges were presented in a generic fashion. It could not be determined if these ranges were based upon weight or volume. The instant CIP addressed this problem by indicating that these ranges were based upon weight. The use of these ranges results in an effective filing date of the instant CIP (November 18, 2003). This is problematic because a related EP reference (EP 1 177 862 A2) would then qualify as a 102(b) reference, wherein a 102/103 rejection could be made. The rationale for this rejection would have been the following:

Based on the nature of the prior art composition (resins and filler), the disclosed percentages would have either represented weight percentages or volume

Art Unit: 1712

percentages. If they were weight percentages, the reference anticipates. If they were volume percentages, there would likely be some kind of overlap when factoring in the material density or the bulk density of the composition.

A review of the specification was made to determine whether or not these ranges are essential to the instant invention. They are presented as “a specific object of the invention.” In addition, they disclose a method of making that does not feature these specified ranges. Furthermore, there is not mention of criticality, with respect to these ranges. In light of this, the following was determined: it is clear that the instantly claimed materials are essential elements; however, it is not immediately clear that their disclosed concentrations are an essential feature.

Accordingly, new claims were drafted wherein the numerical ranges were removed, and the transitional language was changed to “consisting essentially of”. These changes restore the effective filing date to the filing date of the parent application (August 1, 2001). These changes also disqualify Applicant’s own EP reference as prior art.

Allowable Subject Matter

7. Claims 13-17 are allowed.
8. The following is an examiner's statement of reasons for allowance:

Hall (US Pat. No. 4,016,857) disclose an epoxy adhesive featuring amine hardeners and an optional polysulfide flexibilizer. This adhesive is used in diamond abrasive applications; however, there is no teaching or suggestion to incorporate the instantly claimed (polyvinyl-formal treated) synthetic diamonds into Hall's adhesive.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

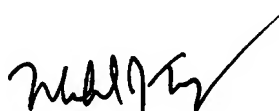
Art Unit: 1712

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael J. Feely
Primary Examiner
Art Unit 1712

September 27, 2007

**MICHAEL FEELY
PRIMARY EXAMINER**